



ROI Whitepaper

Energy, Utilities, & Telecommunications Industry Summary

Key Insights

- Hogan demonstrates how competencies like [Service Orientation](#) and [Developing Teams](#) drive success across the Energy, Utilities, and Telecommunications sectors.
 - More than 70 [Validity Generalization](#) studies show Hogan's breadth of industry experience, from [Distribution Planners](#) to [Future Leaders](#).
 - Over 15 [ROI](#) studies demonstrate the impact Hogan has on higher [Sales Revenue](#), greater [Engagement](#), and safer [Drivers](#).
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About Hogan

Hogan has decades of experience providing cutting-edge assessment and consulting solutions. Our assessments can be used for a variety of talent management initiatives, from pre-hire selection to executive-level development. Our tools:

- Predict job performance – hire better people by measuring basic employability, work style, safety consciousness, and organizational fit.
- Evaluate career derailers – identify and mitigate performance risks that can degrade leadership success, erode relationships, and damage professional reputation.
- Identify potential – find and develop your organization’s next generation of top talent.
- Develop leaders – leverage the strategic self-awareness gained through Hogan’s assessment process with executive development and coaching.
- Pair with 360° data and other performance indices – reveal the underlying characteristics and values that drive the behaviors identified in the 360° process. In progressive development programs, 360s provide the what; Hogan provides the why.

Our Tools

Hogan’s assessment offerings measure normal personality characteristics, career derailment risks, core value drivers, and cognitive style. Hogan’s selection and development solutions are driven by a targeted mix of the following assessments:

- HPI – the Hogan Personality Inventory measures normal personality characteristics necessary for job fit, effective relationships, and career success.
- HDS – the Hogan Development Survey is the industry standard for measuring career-derailing personality characteristics.
- MVPI – the Motives, Values, Preferences Inventory reveals a person’s core values, goals, and interests, which impact organizational fit and indicate environments in which individuals will be motivated and satisfied.
- HBRI – the Hogan Business Reasoning Inventory describes a person’s ability to evaluate sets of data, make decisions, solve problems, and avoid repeating past mistakes.

The Hogan Archive

Hogan maintains the industry’s largest and most well-developed archive of original research, affording access to hundreds of real-world validity studies demonstrating the extent to which our assessments predict performance.

- Our research department, composed of masters- and doctorate-level I-O psychologists, regularly conducts return-on-investment (ROI) studies establishing the impact of personality-based selection and development activities on real-world performance outcomes.
- The Hogan archive contains case studies demonstrating ROI across virtually every industry for nearly all job titles listed in the U.S. Department of Labor’s Occupational Information Network (O*NET).
- Performance data are available for more than 375 jobs ranging from clerk to CEO, including energy and utility-related jobs such as oil dispatchers, service technicians, and meter readers.

Industry Background

Within the Hogan archive, we have categorized companies that share a common purpose (or similar business activities) into broad categories that allow us to summarize our assessment experience within a particular industry. The Energy, Utilities, and Telecommunications (EUT) industry represents companies who explore and develop energy sources and provide communication services. These organizations perform a wide range of services, including: (a) extracting, manufacturing, refining, and distributing energy; (b) maintaining infrastructure for public utility services; and (c) providing communication technology. Although the bulk of Hogan’s work in this industry focuses on customer service representatives, our breadth in the field extends to drivers, service technicians, and managers. Furthermore, we can subdivide the EUT industry into the Energy, Utilities, or Telecommunications sectors. This is described in more detail in a sampling of our ROI white papers listed below:

Energy	Utilities	Telecommunications
Managers and Directors	Customer Service Representatives	Managers
Supervisors	Crewmen	Sales & Care Employees

Hogan Job Families

Hogan’s archive contains over 1,000 research studies, with over 100 studies focused on the EUT industry. We have categorized occupations that share common underlying characteristics into broad categories, allowing us to examine the utility of our assessments for predicting success across jobs. Hogan classified the EUT jobs into one of our seven job families, as described in the table below.

Hogan Job Family	Definition
Managers & Executives	Employees assigned to positions of administrative or managerial authority over the human, physical, and financial resources of the organization.
Professionals	Employees with little legitimate authority, but high status within the organization because of the knowledge and/or skills they possess.
Technicians & Specialists	Employees who rely on the application of highly specific knowledge in skilled manipulation (e.g., operation, repair, cleaning, and/or preparation) of specialized technology, tools, and/or machinery.
Sales & Customer Support	Employees who use appropriate interpersonal style and communication techniques to establish relationships, sell products or services that fulfill customers’ needs, and provide courteous and helpful service to customers after the sale.
Operations & Trades	Employees who are craft workers (skilled), operatives (semi-skilled), and laborers (unskilled) whose job knowledge and skills are primarily gained through on-the-job training and experience; little prerequisite knowledge or skill is needed.
Service & Support	Employees that perform protective services for individuals and communities (e.g., police, fire fighters, guards) and non-protective services for individuals that require little to no formal training but a high degree of personal interaction (e.g., food service, recreation).
Administrative & Clerical	Employees who plan, direct, or coordinate supportive services of an organization. These employees engage in variety of non-manual activities (e.g., recordkeeping, mail distribution, handling information requests, telephone operator/receptionist).

Competency Studies

Organizations often use competency models to provide a common framework for aligning human capital initiatives such as recruitment, selection, training, and promotion. Hogan offers a variety of competency-related solutions that allow organizations to incorporate personality assessments into these programs.

Each approach begins by mapping client competencies to those from the Hogan Competency Model (HCM). We then rely on synthetic and content validity evidence to align assessment scales from the HPI, HDS, and MVPI with each competency. This helps us determine which personality characteristics drive performance related to the specific competency. As seen in the following table, several EUT clients have used our tools to predict key competencies specific to their organization:

Job Title (Study #)	Competency	Industry	Key Scales
Leaders & Managers (580)	Quick to Learn	Energy	HPI Adjustment & HPI Inquisitive
Leaders (664)	Drive & Lead Change	Energy	HPI Ambition, HDS Excitable, & MVPI Security
Managers (946)	Developing Teams	Energy	HPI Ambition, HDS Reserved, & MVPI Altruism
Leaders (875)	Dependability	Energy	HPI Sociability & HDS Imaginative
Leaders (807)	Innovation	Energy	HPI Inquisitive, HDS Imaginative, & MVPI Aesthetics
Leaders (826)	Results Orientation	Energy	HPI Ambition, HDS Cautious, & MVPI Power
Leaders (939)	Service Orientation	Utilities	HPI Interpersonal Sensitivity & HDS Dutiful
Managers, Directors, & Vice Presidents (680)	Drive for Results	Utilities	HPI Prudence, HDS Bold, & MVPI Power
Managers & Executives (974)	Business Insight	Telecommunications	HPI Ambition, HDS Cautious, & MVPI Commerce

Validity Generalization Studies

Given the vast number of local validation studies stored in the Hogan archive, we can use these criterion-related validity studies as the foundation for generalizing validity. Validity generalization methods are supported by a large body of empirical literature: we use the following three methods in our research design:

- Meta-Analytic Validity Generalization – which uses meta-analytic procedures for determining the relationship between the Hogan scales and job performance at a broad, job family level.
- Transportability of Validity – which involves using validity evidence from one or more criterion-related validity studies found to be similar to the target job under study.
- Synthetic Validity – which establishes the validity of a set of measures for predicting specific job components (i.e., competencies) considered important for a job.

As seen in the following table, multiple clients have used our validity generalization approach to predict success in EUT jobs.

Energy	Utilities	Telecommunications
Cleaning Technicians (906)	Crewman (907)	Account Executives & Sales (328.1, 217.1)
Customer Service Associates (747)	Customer Counter Clerks (364)	Business Sales Professionals (1037)
Cylinder Handlers/Processors (388)	Customer Service Center Agents (260)	Customer Service Representatives (217, 236, 298, 383, 589)
Distribution Planners (1001)	Customer Service Representatives (322.2, 364, 371, 1004, 1044)	Digital Store Representatives (435.3)
District Managers (378)	Drivers (322)	Direct Sales Representatives (435.2)
Drivers (345, 391, 852, 921)	Engineers (978)	Field Loyalty Representatives (435.4)
Front-line Supervisors (395.1)	Field and Service Technicians (897)	Field Service Representatives (261)
Human Resource Managers (395)	Groundmen (1046)	Inbound Loyalty Representatives (435.5)
Job Applicants (268, 314)	Linemen (1046)	Inbound Sales Representatives (435.1)
Lab Technicians (388.1)	Managers (264)	Interns (993)
Managers (1002)	Marketing Representatives (903)	Leadership Development Program (992)
Operation Technicians (860, 895)	Meter Readers (386, 536)	Managers (967, 997, 998)
Production Technicians (305)	Operations Supervisors (904, 928)	Sales Engineers (329)
Remote Operators (1003)	Route Manager (322.3, 928)	SOST Representatives (435)
Respiratory Therapist Unit Managers (857)	Supervisors (264,1, 475, 999)	Supervisory Excellence Program (562)
Respiratory Therapists (854)	Technicians (322.1)	System Designers (328)
Sales Representatives (853)	Tellers (368)	Technical Sales (329.1)
Territory Managers (471)	Utility Workers (373)	Technical Support Representatives (435.6, 590)

ROI Studies

Hogan conducts criterion-related validity studies using a three-step process: (1) collecting Hogan assessment data, (2) collecting job performance data (i.e., supervisor performance ratings and objective performance metrics), and (3) conducting analyses examining the relationships between the assessment and performance data.

When conducting criterion-related validity research, we find it useful to demonstrate what a selection system based on the Hogan profile means in practical terms, or ROI. The following case studies were excerpted from the Hogan archive to show how using our assessments translates into measurable results when companies hire candidates into Energy, Utilities, and Telecommunications jobs. More detailed information for each study can be found in the job title hyperlinks below.

Managers & Executives

- [Leaders](#) (975) – A national satellite service provider used the HPI, HDS, and MVPI to understand important characteristics about their Leaders.
 - Hogan revealed that Leaders who are trustworthy (HPI Interpersonal Sensitivity), energetic (HDS Colorful), and promote fun and enjoyable work environments (MVPI Hedonistic) create more engaged employees.
 - Candidates who fit the recommended Hogan profile were more likely to be ranked as top performers compared to those who did not fit the profile.
- [Managers and Directors](#) (771) – An international wind energy production company used the HPI, HDS, and MVPI to select Managers and Directors.
 - Hogan found that Managers and Directors who stay calm under pressure (HPI Adjustment), deliver results (HPI Ambition), build maintain relationships (HPI Interpersonal Sensitivity), are dependable (HPI Prudence), seem cooperative (HDS Leisurely), act decisively (HDS Cautious), and enjoy social interaction (MVPI Affiliation) are the strongest performers.
 - Candidates who fit the Hogan profile were twice as likely as incumbents who did not pass the profile to achieve high ratings of overall performance.
- [Managers](#) (646) – A global refinery and gas producer used the HPI and HDS to hire Managers.
 - Hogan showed that Managers who are dependable (HPI Prudence), interested in training and development opportunities, (HPI Learning Approach), practical and hands-on (HPI Inquisitive). calm under pressure (HDS Excitable), and concerned about others (HDS Reserved) are the best performers.
 - Candidates who fit the Hogan profile received higher performance ratings and had more engaged employees than those who did not fit the profile.
- [Senior Managers](#) (487) – A Fortune 100 global communications company used the HPI and HDS to select Senior Managers.
 - Hogan found that Senior Managers who are competitive (HPI Ambition), perceptive (HPI Interpersonal Sensitivity), detail-oriented (HPI Prudence), insightful (HDS Skeptical), agreeable and conflict averse (HDS Leisurely), and innovative and creative (HDS Imaginative) are the strongest performers.

- Hogan demonstrated that leadership promise and overall potential correlated positively with several HPI scales and had negative relationships with several HDS scales.
- [Managers](#) (309) – A telecommunications holding company used the HPI to select Managers.
 - Hogan found that Managers who stay calm under pressure (HPI Adjustment), deliver results and work hard (HPI Ambition), build and maintain relationships (HPI Interpersonal Sensitivity), and are dependable and detail-oriented (HPI Prudence) are the strongest performers.
 - Candidates who fit the Hogan profile were rated higher by supervisors across 14 performance dimensions than those who did not fit the profile.
- [Supervisors](#) (151) – An energy company used the HPI to identify high performing Supervisors.
 - Hogan demonstrated that Supervisors who deliver results and work hard (HPI Ambition), build and maintain relationships (HPI Interpersonal Sensitivity), are dependable and detail-oriented (HPI Prudence), and think strategically with a high degree of curiosity (HPI Inquisitive) are better performers.
 - Candidates who fit the Hogan profile had higher overall performance than those who did not fit the profile.

Operations & Trades

- [Drivers](#) (537) – An international provider of industrial gases used the HPI to select Drivers.
 - Hogan showed that successful Drivers stay calm under pressure (HPI Adjustment), build and maintain relationships (HPI Interpersonal Sensitivity), are dependable and detail-oriented (HPI Prudence), and are practical and level headed (HPI Inquisitive).
 - Candidates who fit the Hogan profile had fewer performance problems, rule violations, and safety issues than those who did not fit the profile.
- [Crewman](#) (214) – A gas corporation used the HPI to select Crewman.
 - Hogan demonstrated that the most successful Crewman stay calm under pressure (HPI Adjustment) and are dependable and detail-oriented (HPI Prudence).
 - Candidates who fit the Hogan profile had higher supervisor ratings of performance than those who did not fit the profile.

Professionals

- [College Graduates](#) (871) – An international utility company used the HPI, HDS, and MVPI to select recent College Graduates for entry level-professional positions.
 - Hogan found that successful College Graduates at the company are willing to remain current on business and technical trends (HPI Learning Approach), avoid overreacting in difficult situations (HDS Excitable), and are motivated by predictable environments (MVPI Security).
 - Candidates who fit the Hogan profile were better prepared and stronger performers than those who did not fit the profile.

Sales & Customer Support

- [Sales & Care Employees](#) (297) – A world provider of voice and data services used the HPI to select Sales and Care employees.
 - Hogan found that successful Sales and Care employees stay calm under pressure (HPI Adjustment), deliver results and work hard (HPI Ambition), and work well with others (HPI Interpersonal Sensitivity).
 - Candidates who fit the Hogan profile had higher supervisor performance ratings than those who did not fit the profile.
- [Account Managers](#) (310) – A global gas distributor used the HPI and HDS to select Account Managers.
 - Hogan showed that high performing Account Managers are competitive, driven, and goal-oriented (HPI Ambition), achievement-oriented (HPI Learning Approach), skilled at building and maintain relationships (HPI Interpersonal Responsibility), thinking strategically (HPI Inquisitive), and are socially adept and outgoing (HDS Colorful).
 - Candidates who fit the Hogan profile had higher total sales revenue and better supervisor ratings of overall job performance compared to those who did not fit the profile.
- [Sales Associates](#) (567) – A global telecommunications company used the HPI to hire Sales Associates.
 - Hogan revealed that the best Sales Associates are results-oriented (HPI Ambition), approachable (HPI Interpersonal Sensitivity), and are hard workers that pay attention to detail (HPI Prudence).
 - Candidates who fit the Hogan profile were more likely to stay with the company and generate more sales than those who did not fit the profile.
- [Customer Service Representatives](#) (CSR - 630) – A water utility company used the HPI and MVPI to select CSRs.
 - Hogan demonstrated that high performing CSRs stay calm under pressure (HPI Adjustment), build and maintain relationships (HPI Interpersonal Sensitivity), are dependable and detail-oriented (HPI Prudence), enjoy social interaction and networking (MVPI Affiliation), and enjoy helping others (MVPI Altruistic).
 - Candidates who fit the Hogan profile had higher ratings of demonstrated work performance, relationship management, and customer satisfaction than those who did not fit the profile.

Technicians & Specialists

- [Live Line Workers](#) (870) – An electrical energy producer used the HPI to hire Live Line Workers.
 - Hogan revealed that high performing Live Line Workers stay calm under pressure (HPI Adjustment), strive to achieve challenging performance goals (HPI Ambition), and are conscientious, detailed, and rule-followers (HPI Prudence).
 - Candidates who fit the Hogan profile are involved in fewer accidents than those who did not fit the profile.
- [Service Technicians](#) (770) – An international wind energy producer used the HPI, HDS, and MVPI to select wind turbine Service Technicians.
 - Hogan showed that successful Service Technicians take initiative (HPI Ambition), remain vigilant (HPI Prudence), think strategically with a high degree of curiosity (HPI Inquisitive), do not deviate from established procedures (HDS Imaginative), and value analytical problem-solving (MVPI Science).
 - Candidates who fit the Hogan profile were 3.5 times more likely to be rated as high performers compared to those who did not fit the profile.

Service & Support

- [Call Center Technical Support Personnel](#) (427) – A national provider of telecommunication products used the HPI to hire Call Center Technical Support Personnel (CCT).
 - Hogan demonstrated that the best CCT support personnel are calm and even-tempered (HPI Adjustment), energetic and goal-oriented (HPI Ambition), work well with others (HPI Interpersonal Sensitivity), and follow rules and act dependable (HPI Prudence).
 - Candidates who fit the Hogan profile were 2.3 times more likely to be rated as a high performer than those who did not fit the profile.

Additional Validity Studies

The Hogan Archive contains several additional criterion-related validity studies within the Energy, Utilities, and Telecommunications industry. These jobs range from mechanics to meter readers. This breadth of job titles demonstrates Hogan's history and experience with the Energy, Utilities, and Telecommunications industry.

Job Title (Study #)	Job Family
Store Managers (175)	Managers and Executives
Apprentice Mechanic Employees (290)	Operations and Trades
Truck Drivers (323)	Operations and Trades
Meter Readers (426)	Operations and Trades
Oil Dispatchers (249)	Service and Support
Cashiers/Customer Service Representatives (287)	Service and Support
Radiation Protection Technicians (223)	Technicians and Specialists
CSRs/Account Managers (109)	Sales and Customer Support
Customer Operation Representatives (86)	Sales and Customer Support
Major Account Representatives (362)	Sales and Customer Support